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10/033,674	12/27/2001	Katsuhito Kitahara	P6395a	2858

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EPSON RESEARCH AND DEVELOPMENT INC  
INTELLECTUAL PROPERTY DEPT  
150 RIVER OAKS PARKWAY, SUITE 225  
SAN JOSE, CA 95134

EXAMINER

ROHWER, JACOB P

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/033,674	<b>Applicant(s)</b> KITAHARA ET AL.	
	<b>Examiner</b> Jacob P. Rohwer	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 3,958,509 to Murray et al, in view US Patent No 5,930,009 to Sato et al, further in view of US Patent No 5,493,386 to Thompson, and further in view of US Patent No 6,647,126 to Wen.

Regarding claim 1, Murray discloses a system (**Fig 6 and Fig 9A**) for controlling the amount of ink used to print an image comprising:

an operating unit; (**Fig 5 and 6, Col 3 Lin 34-37, Col 14 Lin 24-34**)

a capturing unit (**Fig 6 #30**) for obtaining an original image that is subject to image processing in response to an operation performed via the operating unit; (**Col 1 Lin 48-58**)

an ink-amount calculating unit for calculating data that substantially relates to an ink-amount required for printing the image generated by the image processing unit; (**Col 2 Lin 58-63**)

a display unit (**Fig 5 #34**) for displaying the ink-amount data (**Col 10 Lin 63-66**) and the image data. (**Col 1 Lin 55-58**)

Although Murray discloses that an operator is capable of adjusting ink control of the image at a workstation, **(Col 1 Lin 55-58)** Murray does not expressly disclose that the image data and the ink-amount data are displayed simultaneously, such that when a change is made to the displayed image data, the ink-amount calculating unit recalculates an ink-amount for printing the changed image data in substantially real-time, and the display unit displays the changed image data and the recalculated ink amount data simultaneously.

However, Sato discloses an apparatus in which an image and graphs corresponding to color information values are displayed simultaneously and when a change is initiated to the original image by the operator, adjusted image data is displayed and corresponding graphs relating to the color information to the adjusted image data is updated. **(Fig 2-3, Col 7-8 Lin 57-67 and 1-23)** Additionally, Sato displays the adjusted image data and the modified or recalculated color information graphs simultaneously as shown in **Fig 2**.

The Sato and Murray Patents are combinable because they are from the same field of endeavor relating to image processing of graphics.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the simultaneous displaying of the original image and adjusted values, and the updating and modification process as specified in the Sato Patent in order to display the ink amounts corresponding to the reproduction of the image for printing as specified in Murray.

The suggestion/motivation for doing so would have been to make it more convenient and quicker for an operator to see the result of an adjustment.

Furthermore, the combination of Murray and Sato does not expressly disclose that the image being processed and printed is a logo.

However, Thompson discloses an image forming apparatus where the image being processed is a logo. **(Col 2 Lin. 23-26)**

The combination of Murray and Sato and the Thompson Patent are combinable because they are from the same field of endeavor relating to an apparatus that captures and processes an image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply the system as specified in Murray and Sato to an image such as a logo as specified in the Thompson Patent.

The suggestion/motivation for doing so would have been to apply the system to every type of images whether logos or digital.

Finally, the combination of Murray, Sato and Thompson does not expressly disclose that the processing of the image is for a transaction printer.

However, Wen discloses an apparatus where a user can process and produce an image at a kiosk, where the image is displayed for processing before it is printed, (Col 2 Lin 20 and 37-55) and furthermore the kiosk allows for a transaction to take place regarding the printing of the image. **(Col 3 Lin 45-64)**

The combination of Murray, Sato and Thompson and the Wen Patent are combinable because they are from the same field of endeavor relating to an apparatus that captures and processes an image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art provide the system as specified in the combination of Murray, Sato and Thompson in a public setting so that the user can process a desired image for output as specified in the Wen Patent.

The suggestion/motivation for doing so would have been to make it easier and more convenient to allow a user to output a desired image in a public setting when necessary.

Therefore, it would have been obvious to combine the Murray, Sato, Thompson and Wen Patents in order to obtain the invention as specified in claim 1.

**Claims 2-5, 14-18, 25-29, 36 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Murray, Sato, Thompson and Wen as applied to claim 1 above, and further in view of US Patent No 5,592,298 to Caruso.

Regarding claim 2, which depends from claim 1, the combination of Murray, Sato, Thompson and Wen does not expressly disclose the apparatus as described in claim 1, wherein the ink-amount calculating unit determines a number of color pixels in the logo data as attribute data.

However, Caruso discloses an apparatus, wherein the ink-amount calculating unit determines a number of color pixels in the logo data as attribute data. **(Col 3 Lin 63-67, Col 4 Lin 1-3, Fig 1 Reference 114)**

The combination of Murray, Sato, Thompson and Wen as applied in claim 1 and the Caruso Patent are combinable because they are from the same field of endeavor that relates to image processing and printing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the determined number of pixels in the Caruso Patent in order to determine the ink amount as specified in the combination of Murray, Sato, Thompson and Wen.

The suggestion/motivation for doing so would have been to enable the user to recognize ink consumption based on the pixel count of the logo being processed.

Therefore, it would have been obvious to combine the Caruso Patent with the combination of Murray, Sato, Thompson and Wen to obtain the invention specified in claim 2.

Regarding claim 3, which depends from claim 1, the combination of Murray, Sato, Thompson and Wen disclose:

an apparatus as described in claim 1, wherein the logo data contains a plurality of colors to be analyzed and their ink quantities displayed on the display unit as attribute data. **(Murray Col 14, Lin 46-57)**

The combination of Murray, Sato, Thompson and Wen does not expressly disclose an ink-amount calculating unit that determines a pixel counts for each color in the logo data as attribute data.

However, Caruso discloses an ink-amount calculating unit that determines a pixel

Art Unit: 2625

Count for each color in the logo data as attribute data. (Col 3 Lin 63-67, Col 4 Lin 1-3, Fig 1 Reference 114)

The combination of Murray, Sato, Thompson and Wen as applied in claim 1 and the Caruso Patent are combinable because they are from the same field of endeavor that relates to image processing and printing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the determined the count of pixels in the image in the Caruso Patent in order to calculate the ink-usage of multiple colors for display as attribute data specified in the combination of Murray, Sato, Thompson and Wen.

The suggestion/motivation for doing so would have been to enable the user to display ink quantities based on pixel count in accordance with the multiple colors used in the image.

Therefore, it would have been obvious to combine the Caruso Patent with the combination of Murray, Sato, Thompson and Wen to obtain the invention specified in claim 3.

Regarding claim 4, which depends from claim 3, the combination of Murray, Sato, Thompson and Wen in further view of Caruso teaches:

An apparatus as described in claim 3, wherein the plurality of logo data colors includes a first printing color and a second printing color, (Thompson, Col 2 Lin 16-32) the ink-amount calculating unit calculates as attribute data the pixel count (please see rational provided in claim 2) of the first color and the pixel count of the second color,



Art Unit: 2625

and the display unit displays the first color pixel count and the second color pixel count as respective attribute data. **(Please see rational provided for claim 3)**

However, the combination of Hoffman, Thompson, Yoshihiro, and Sato in further view of Caruso does not expressly disclose a logo data color including a non-printing color.

However, it is officially noted that it was known to a person skilled in the art that in many cases the non-printing color is included in the logo or image being printed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include this non-printing color in the logo data specified in claim 1.

The motivation for doing so would have been due to the fact that the shape of the entire print data to be printed does not often conform to the precise shape of the actual image being printed by the actual printing colors, therefore requiring the use of the non-printing color as a background in the print data is necessary to highlight the precise shape of the image. Furthermore, often companies determine prior to printing which color they want as the background color to their logo, and as a result this is the color of the print medium they select, which makes it the non-printing color.

Regarding claim 5, which depends from claim 1, rational provided in rejection of claim 3 regarding the number of color pixels is incorporated herein.

The combination further discloses the determination of a percentage of each color relative to the total image, as attribute data. **(Murray, Col 14 Lin 46-57, Col 10 Lin 63-66)**

Regarding claim 14, steps (a)-(e) of the method claimed, please see the rational provided for claims 1 and 2 through the combination of Murray, Sato, Thompson, Wen and Caruso.

In addition, the combination of Murray, Sato, Thompson, Wen and Caruso does not expressly disclose in step (b) generating logo data, including non-printing pixels.

However this limitation can be rejected using the official notice explanation provided in claim 4 and the pixel counting of a plurality of colors provided by Caruso in claim 3. Please see the rational provided in claims 3 and 4.

Regarding claim 15, which depends from claim 14, please see the rational provided for claim 2. In addition, the apparatus of claim 2 performs the method of claim 15.

Regarding claim 16, which depends from claim 14, please see the rational provided for claim 3. In addition, the apparatus of claim 3 performs the method of claim 16.

Regarding claim 17, which depends from claim 16, please see the rational provided for claim 4. In addition, the apparatus of claim 4 performs the method of claim 17.

Regarding claim 18, which depends from claim 14, please see the rational provided for claim 5. In addition, the apparatus of claim 5 performs the method of claim 18.

Art Unit: 2625

Regarding claim 25, it is known that an operating unit specified in claim 1 such as a computer, requires a machine-readable medium embodying a program of instructions for directing a machine to execute a logo data generating method.

Please see rational provided for claim 1.

Regarding claim 26, which depends from claim 25, please see the rational provided for claim 2.

Regarding claim 27, which depends from claim 25, please see the rational provided for claim 3.

Regarding claim 28, which depends from claim 27, please see the rational provided for claim 4.

Regarding claim 29, which depends from claim 25, please see the rational provided for claim 5.

Regarding claim 36, which depends from claim 25, please see the rational provided for claim 25.

It is noted that the references do not explicitly disclose the type of mediums provided in the claim. However, each claimed medium is well known in the art.

It is obvious that a machine-readable medium such as a floppy disc is used to carry any set of program instructions due to the fact that it is very convenient to users because many CPU's comprise a floppy disc drive.

Regarding claim 37, which depends from claim 25, please see the rational provided for claim 25. The program instructions follow the steps provided in claim 25,

Art Unit: 2625

the executable commands are provided by the operating unit and the user, and the data set is the logo or image being analyzed, displayed and printed.

**Claims 6-8, 19-21 and 30-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Murray, Sato, Thompson, Wen and Caruso as specified in claims 1 and 3 above, and further in view of US Patent No 6,027,200 to Takahashi et al.

Regarding claim 6, which depends from claim 1, the combination of Murray, Sato, Thompson, Wen and Caruso teaches:

An apparatus as described in claim 1, wherein the logo data contains a plurality of colors **(Murray Col 14, Lin 46-57)** and the ink-amount calculating unit calculates a count of color pixels in the logo data as attribute data. **(Caruso, Col 3 Lin 63-67, Col 4 Lin 1-3, Fig 1 Reference 114)**

The combination of Murray, Sato, Thompson, Wen and Caruso does not expressly disclose calculating the product of the color pixel count multiplied by an ink amount used to print a pixel.

However, Takahashi discloses calculating the product of an ink dot count multiplied by an ink amount used to print a dot in producing logo data on a medium such as cloth. **(Fig 50, Col 35 Lin 27-32 and 60-64 and Col 49 Lin 56-60)**

The combination of Murray, Sato, Thompson, Wen and Caruso and the Takahashi Patent are combinable because they are from the same field of endeavor that relates to calculating the total ink consumption used to print an image.

Art Unit: 2625

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to calculate the product of the total number of ink dots multiplied by the amount of ink used for each dot by the printer in the Takahashi Patent in order to calculate the total ink amount of a plurality of colors in a logo to be printed as specified in the combination of Murray, Sato, Thompson, Wen and Caruso.

The suggestion/motivation for doing so would have been to determine the total amount of ink consumed in order to print the image.

Therefore, it would have been obvious to combine the Takahashi Patent with the combination of Murray, Sato, Thompson, Wen and Caruso to obtain the invention specified in claim 6.

Regarding claim 7, which depends from claim 1, please see rational provided for claims 6 and 3.

Regarding claim 8, which depends from claim 1, the combination of Murray, Sato, Thompson, Wen and Caruso does not expressly disclose the apparatus as described in claim 6, wherein the ink-amount calculating unit reads an amount of ink consumed for one dot stored for each printer model, and as a result calculates the ink consumption as the product of the read ink consumption amount multiplied by the color pixel count as attribute data.

However, Takahashi discloses an ink consumption calculation wherein an amount of ink consumed for one dot is determined for the printer being used, and as a result calculates the ink consumption as the product of the determined ink consumption amount multiplied by the color dot count as attribute data. **(Fig 50, Col 35 Lin 36**

Art Unit: 2625

**discloses a printer P being used, the CPU of the embodiment in this case, must know the amount of ink used for one dot of the printer P being used.)**

The combination of Murray, Sato, Thompson, Wen and Caruso and the Takahashi Patent are combinable because they are from the same field of endeavor that relates to calculating the total ink amount used to print an image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to calculate the product of the total number of ink dots multiplied by the amount of ink used for each dot by the current printer model in the Takahashi Patent in order to calculate the total ink consumption of a plurality of colors in a logo to be printed as specified in the combination of Murray, Sato, Thompson, Wen and Caruso.

The suggestion/motivation for doing so would have been to determine the total amount of ink consumed in order to print the image based on the printer being used.

Therefore, it would have been obvious to combine the Takahashi Patent with the combination of Murray, Sato, Thompson, Wen and Caruso to obtain the invention specified in claim 8.

Regarding claim 19, which depends from claim 14, please see the rationale provided for claim 6. In addition, the apparatus of claim 6 performs the method of claim 19.

Regarding claim 20, which depends from claim 19, please see the rationale provided for claim 7. In addition, the apparatus of claim 7 performs the method of claim 20.

Regarding claim 21, which depends from claim 19, please see the rationale provided for claim 8. In addition, the apparatus of claim 8 performs the method of claim 21.

Regarding claim 30, which depends from claim 25, please see the rationale provided for claim 6.

Regarding claim 31, which depends from claim 30, please see the rationale provided for claim 7.

Regarding claim 32, which depends from claim 30, please see the rationale provided for claim 8.

**Claims 9-11, 22-24, and 33-35** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Murray, Sato, Thompson, Wen, Caruso and Takahashi as applied to claim 8, and further in view of US Patent No 5,802,420 to Garr et al.

Regarding claim 9, which depends from claim 8, the combination of Murray, Sato, Thompson, Wen, Caruso and Takahashi does not expressly disclose:

a way of determining a standard ink-usage of each type of sheet for ink-usage other than for printing the logo data, and calculates ink-usage per printed sheet from the standard ink-usage and the ink-usage for logo data printing as attribute data.

However, Garr discloses: a way of determining a standard ink-usage of each type of sheet for ink-usage other than for printing the logo data, and calculates ink-usage per printed sheet from the standard ink-usage and the ink-usage for logo data printing as attribute data. **(Col 3 Lin 46-50)**

Art Unit: 2625

The combination Murray, Sato, Thompson, Wen, Caruso and Takahashi and the Garr Patent are combinable because they are from the same field of endeavor that relates to determining the amount of ink consumed to print a particular image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the determination of standard ink-usage of each type of sheet in the Garr Patent in order to calculate the total consumption of ink specified in the combination of Murray, Sato, Thompson, Wen, Caruso and Takahashi.

The suggestion/motivation for doing so would have been to allow the apparatus to function correctly when handling different types of printing sheets.

Therefore, it would have been obvious to combine the Garr Patent with the combination of Murray, Sato, Thompson, Wen, Caruso and Takahashi to obtain the invention specified in claim 9.

Regarding claim 10, which depends from claim 9, the combination further teaches [in Garr]:

an apparatus as described in claim 9, wherein the ink-amount calculating unit calculates a number of sheets that can be printed per ink cartridge from a previously stored ink cartridge capacity and calculated ink-usage per printed sheet as attribute data. **(Col 3 Lin 1-4)**

Regarding claim 11, which depends from claim 9, the combination further teaches [in Garr]:

an apparatus as described in claim 9, wherein the ink-amount calculating unit calculates average ink cartridge life from the calculated ink-usage per printed sheet and



Art Unit: 2625

a previously stored average number of printed sheets issued in a specific time. **(Col 10 Lin 40-45)**

Regarding claim 22, which depends from claim 19, please see the rational provided for claim 9. In addition, the apparatus of claim 9 performs the method of claim 22.

Regarding claim 23, which depends from claim 22, please see the rational provided for claim 10. In addition, the apparatus of claim 10 performs the method of claim 23.

Regarding claim 24, which depends from claim 22, please see the rational provided for claim 11. In addition, the apparatus of claim 11 performs the method of claim 24.

Regarding claim 33, which depends from claim 30, please see the rational provided for claim 9.

Regarding claim 34, which depends from claim 33, please see the rational provided for claim 10.

Regarding claim 35, which depends from claim 33, please see the rational provided for claim 11.

**Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Murray, Sato, Thompson and Wen as applied to claim 1 above, and further in view of US Patent No 5,905,894 to De Bonet.

Regarding claim 12, which depends from claim 1, the combination of Murray, Sato, Thompson and Wen does not disclose:

an apparatus as described in claim 1, wherein the calculated results from the ink-amount calculating unit can be externally output as print data in conjunction with the logo data.

However, De Bonet discloses an output interface that provides requisite circuitry to electrically connect and interface display and printer to the computer system (**Fig 1 Reference #130, # 150 and #160, Col 5 Lin 44-46**) This reference shows that data to be displayed, such as the calculated results from the ink amount calculating unit, can be externally output as print data when connected to a printer.

The combination of Murray, Sato, Thompson and Wen and the De Bonet Patent are combinable because they are from the same field of endeavor relating to displaying output information.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to connect a printer to the display as specified in the De Bonet Patent in order to output the ink amount as specified in the combination of Murray, Sato, Thompson and Wen as print data.

The suggestion/motivation for doing so would be to allow for a printed visual display of the ink-amount calculated results in that might need to be shown and distributed to others, say in a company meeting for example.

Therefore it would have been obvious to combine the De Bonet Patent with the combination of Murray, Sato, Thompson and Wen to obtain the invention in claim 12.

Art Unit: 2625

**Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Murray, Sato, Thompson and Wen as applied to claim 1 above, and further in view of US Patent No 5,782,567 to Endo.

Regarding claim 13, which depends from claim 1, the combination of Murray, Sato, Thompson and Wen does not disclose:

an apparatus as described in claim 1, wherein the logo data is image data stored in the printer for printing on a print sheet such as a sales receipt, transaction receipt, or other form.

However, Endo discloses a sale apparatus, wherein the logo data is image data stored **(Col 2 Lin 57-58)** in the printer for printing on a print sheet such as a sales receipt, transaction receipt, or other form. **(Col 2, Lin 16-19)**

The combination of Murray, Sato, Thompson and Wen and the Endo Patent are combinable because they are from the same field of endeavor relating to printing logo data.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use logo data to be printed on a receipt as specified in the Endo Patent in the system of Murray, Sato, Thompson and Wen.

The suggestion/motivation for doing so would have been the fact that many logos, such as a company logo, are often printed when a sale is made in order to advertise or for convenience to the customer for classifying the printed material.

Therefore it would have been obvious to combine the Endo Patent with the combination of Murray, Sato, Thompson and Wen to obtain the invention in claim 13.

**Claims 38, 39 and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Murray, Sato, Thompson and Wen as applied to claim 1 above, further in view of Garr, further in view of Endo as applied to claim 13, and further in view of US Patent No 6,377,359 to Higashio.

Regarding claim 38, please see the rational provided for claims 1, 12 and 13 above. Furthermore the combination of Murray, Sato, Thompson and Wen, Garr and Endo discloses:

a host system having a data transmission unit for sending logo data to an ink-jet printer (**Garr Col 2 Lin 56**) for printing.

It is noted that the combination of Murray, Sato, Thompson, Wen, Garr and Endo does not explicitly disclose a first computing unit for calculating the size for the logo data and displaying the logo size calculated by the first computing unit.

However, Higashio explicitly discloses the calculation of the size of the image data printed by the printer. (**Fig 11 discloses calculating an enlargement/reduction ratio in order to produce output image, Col 7 Lin 47-54**)

Additionally, the limitation that at least one of the logo size or the ink-usage is displayed simultaneously with the image data is discussed in the rejection of claim 1.

The combination of Murray, Sato, Thompson, Wen, Garr and Endo and the Higashio Patent are combinable because they are from the same field of endeavor relating to aspects of an apparatus that captures, processes, and prints an image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the calculation of the logo data size printed for the printer in the

Higashio Patent as attribute data to be displayed on the display unit specified in the combination of Murray, Sato, Thompson, Wen, Garr and Endo.

The suggestion/motivation for doing so would have been to monitor ink usage and actual size of printed image or logo desired.

Therefore, it would have been obvious to combine the Higashio Patent with the combination of Murray, Sato, Thompson, Wen, Garr and Endo in order to obtain the invention as specified in claim 38.

Regarding claim 39, please see the rationale provided for claims 1 and 38. The apparatus of claim 38 would perform the method of claim 39.

Regarding claim 40, which depends from claim 39, please see rejections of claims 14 and 39.

### ***Response to Arguments***

Applicant's arguments, filed 15 June 2006, with respect to the rejections of the independent claims and the Hoffman and Yoshiro References have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the combination of Murray, Sato, Thompson and Wen as specified in claim 1 above. Furthermore applicant argues that the types of printing (such as the printing plate in Murray and the transaction printer of the claimed invention) are two completely different printing techniques. This difference is noted, however in view of the references, it would have been obvious to modify the Murray (and previously presented Hoffman) References in light of a more modern ink-jet printing technique in order to determine ink

amounts. Murray is directed toward an apparatus where an operator is able to view and control ink usage for printing an image, and this concept in view of the secondary references reads on the claims as submitted.

Applicant's arguments with regard to the Endo Reference have been fully considered but they are not persuasive. Endo discloses that the POS stations can be a personal computer (**Col 1 Lin 15**), that printable information includes a logo and receipt information (**Col 2 Lin 16-19**), and that the user is able to confirm the printing results through the personal computer, on a display for example. (**Col 2 Lin 57-61**) This implies that in order for the user to confirm the logo data, the logo data must be stored in the POS personal computer.

Examiner wants to remind applicant that due to the withdrawal of the previous rejection and the submission of the new rejection as specified above, this action is made non-final.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob P. Rohwer whose telephone number is 571-272-5509. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JR  
8/17/06



MARK ZIMMERMAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600